Appendix Table 1. ICD-9 and Reason For Visit (RFV) Codes Used to Define Existing HIV Infection, Pregnancy Status, and HIV Risk

Category/Code	Description
Existing HIV	
infection	
ICD-9	
042	Human immunodeficiency virus [HIV] disease
V08	Asymptomatic human immunodeficiency virus [HIV] infection status
07953	Human immunodeficiency virus, type 2 [HIV-2]
RFV	
20151	Human immunodeficiency virus (HIV) with or without associated conditions
Pregnancy	
ICD-9	
V22-	Supervision of normal first pregnancy
V23-	Supervision of high-risk pregnancy
V24-	Postpartum care and examination immediately after delivery
V28-	Encounter for antenatal screening of mother
V615-	Multiparity
V616-	Illegitimate pregnancy
V9103-	Twin gestation
631-	Other abnormal product of conception
64233-	Transient hypertension of pregnancy, antepartum condition or
	complication
64303-	Mild hyperemesis gravidarum, antepartum condition or complication
64613-	Edema or excessive weight gain in pregnancy, without mention of
	hypertension, antepartum condition or complication
76520-	Unspecified weeks of gestation
76529–	37 or more completed weeks of gestation
63492-	Spontaneous abortion, without mention of complication, complete
63792-	Unspecified abortion, without mention of complication, complete
64813-	Thyroid dysfunction of mother, antepartum condition or complication
64204-	Benign essential hypertension complicating pregnancy, childbirth, and
	the puerperium, postpartum condition or complication
64793–	Unspecified infection or infestation of mother, antepartum condition or complication
65703-	Polyhydramnios, antepartum condition or complication
65943-	Grand multiparity, antepartum condition or complication
65963–	Elderly multigravida, antepartum condition or complication
67103–	Varicose veins of legs complicating pregnancy and the puerperium, antepartum condition or complication

64393–	Unspecified vomiting of pregnancy, antepartum condition or complication			
RFV	•			
17900	Problems of pregnancy			
17901	Pain during pregnancy			
17902	Spotting, bleeding during pregnancy			
17903	Symptoms of onset of labor			
17910	Postpartum problems			
18102	Other symptoms referable to breast: postpartum problems			
27350	Diagnosed complications of pregnancy and puerperium			
32050	Prenatal examination, routine			
32150	Postpartum examination, routine			
35150	Counseling and examinations for pregnancy interruption			
STD risk				
ICD-9				
V016-	Contact with or exposure to venereal diseases			
V027-	Carrier or suspected carrier of gonorrhea			
V028-	Carrier or suspected carrier of other venereal diseases			
V745-	Screening examination for venereal disease			
V692-	High-risk sexual behavior			
091-	Early syphilis symptomatic			
092-	Early syphilis latent			
093–	Cardiovascular syphilis			
094–	Neurosyphilis			
095–	Other forms of late syphilis with symptoms			
096–	Late syphilis, latent			
097–	Other and unspecified syphilis			
098–	Gonococcal infections			
099–	Other venereal diseases			
131-	Trichomoniasis			
614–	Inflammatory disease of ovary fallopian tube pelvic cellular tissue and			
	peritoneum			
615–	Inflammatory diseases of uterus except cervix			
0541-	Genital herpes			
6160-	Cervicitis and endocervicitis			
07810-	Viral warts, unspecified			
07811-	Condyloma acuminatum			
07888–	Other specified diseases due to chlamydiae			
07988–	Other specified chlamydial infection			
07998–	Unspecified chlamydial infection			

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60490-	Orchitis and epididymitis, unspecified
RFV	
17002	Symptoms of the Penis: Infection, inflammation, swelling
17003	Symptoms of the Penis: Lumps, bumps, growths, warts
17050	Penile discharge
17703	Vulvar disorders: Growth, wart, cyst, ulcer, sore
17753	Pelvic symptoms: infection, inflammation
20200	Sexually transmitted diseases
27200	Pelvic Inflammatory Disease
27250	Cervicitis, vaginitis
33151	Blood test for sexually transmitted disease
34050	Exposure to sexually transmitted disease
34080	Possible HIV
34090	Exposure to human immunodeficiency virus
58300	Rape
58301	Sexual abuse

Appendix Table 2A. Multivariable Regression Analysis of HIV Testing at Visits Made by HIV (-) Nonpregnant Females Aged 15–65 Years to U.S. Physicians' Offices, National Ambulatory Medical Care Survey 2009–2012

Model 1: Full		
Predictor	APR (95% CI)	<i>p</i> -value
Age, years	,	< 0.001
15–19	0.66 (0.33, 1.34)	0.254
20–29	ref	
30–39	1.01 (0.64, 1.59)	0.975
40–49	0.39 (0.21, 0.74)	0.004
50–65	0.18 (0.08, 0.40)	< 0.001
Race/Ethnicity		< 0.001
Non-Hispanic white	ref	
Non-Hispanic black	3.34 (2.08, 5.37)	< 0.001
Hispanic	1.95 (1.18, 3.22)	0.009
Non-Hispanic other	2.05 (0.97, 4.32)	0.060
Insurance type		0.306
Medicaid	1.00 (0.61, 1.64)	0.991
Private	ref	
Uninsured	0.52 (0.24, 1.14)	0.105
Other	0.63 (0.32, 1.25)	0.188
Geographic region		0.685
Northeast	1.54 (0.61, 3.90)	0.357
Midwest	ref	
South	1.17 (0.50, 2.72)	0.720
West	1.05 (0.41, 2.67)	0.919
Office setting		0.021
Private practice	0.58 (0.36, 0.92)	0.021
Other	ref	
Territory type		0.001
Urban	6.81 (2.17, 21.37)	0.001
Rural/Other	ref	
Provider specialty		0.029
General and family practice	1.44 (0.67, 3.10)	0.353
Internal medicine	ref	
Obstetrics and gynecology	2.11 (0.89, 5.05)	0.092
Other	0.57 (0.20, 1.64)	0.296
Visit type		< 0.001
Preventive	3.20 (2.00, 5.14)	< 0.001
Other	ref	
STD risk		< 0.001
Yes	12.78 (6.72, 24.31)	< 0.001
No	ref	

Notes: Hosmer-Lemeshow Goodness-of-Fit Test Statistics: Satterthwaite F: 2.26; Satterthwaite Adjusted DF: 4; Satterthwaite *p*-value: 0.063.

Appendix Table 2B. Multivariable Regression Analysis of HIV Testing at Visits Made by HIV (-) Nonpregnant Females Aged 15–65 Years to U.S. Physicians' Offices, National Ambulatory Medical Care Survey 2009–2012

Model 2: Reduced (Geographic region removed)			
Predictor	APR (95% CI)	<i>p</i> -value	
Age, years		< 0.001	
15–19	0.68 (0.34, 1.37)	0.280	
20–29	ref		
30–39	1.01 (0.64, 1.60)	0.966	
40–49	0.39 (0.21, 0.74)	0.004	
50–65	0.18 (0.08, 0.40)	< 0.001	
Race/Ethnicity		< 0.001	
Non-Hispanic white	ref		
Non-Hispanic black	3.33 (2.02, 5.49)	< 0.001	
Hispanic	1.93 (1.18, 3.16)	0.009	
Non-Hispanic other	2.00 (0.99, 4.05)	0.054	
Insurance type		0.311	
Medicaid	1.01 (0.62, 1.63)	0.976	
Private	ref		
Uninsured	0.54 (0.25, 1.16)	0.112	
Other	0.63 (0.32, 1.23)	0.175	
Office setting		0.024	
Private practice	0.59 (0.37, 0.93)	0.024	
Other	ref		
Territory type		< 0.001	
Urban	7.05 (2.28, 21.80)	< 0.001	
Rural/Other	ref		
Provider specialty		0.030	
General and family practice	1.37 (0.64, 2.94)	0.414	
Internal medicine	ref		
Obstetrics and gynecology	2.10 (0.89, 4.94)	0.090	
Other	0.56 (0.20, 1.56)	0.265	
Visit type	,	< 0.001	
Preventive	3.17 (1.98, 5.09)	< 0.001	
Other	ref		
STD risk		< 0.001	
Yes	12.57 (6.64, 23.80)	< 0.001	
No	ref		
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Notes: Hosmer-Lemeshow Goodness-of-Fit Test Statistics: Satterthwaite F: 1.76; Satterthwaite Adjusted DF: 4; Satterthwaite *p*-value: 0.140

Appendix Table 2C. Multivariable Regression Analysis of HIV Testing at Visits Made by HIV (-) Nonpregnant Females Aged 15–65 Years to U.S. Physicians' Offices, National Ambulatory Medical Care Survey 2009–2012

Model 3: Final (Geographic region and insurance type removed)			
Predictor	APR (95% CI)	<i>p</i> -value	
Age, years		< 0.001	
15–19	0.66 (0.34, 1.28)	0.217	
20–29	ref		
30–39	0.88 (0.55, 1.42)	0.608	
40–49	0.40 (0.23, 0.69)	< 0.001	
50–65	0.15 (0.07, 0.34)	< 0.001	
Race/Ethnicity		< 0.001	
Non-Hispanic white	ref		
Non-Hispanic black	3.26 (1.98, 5.36)	< 0.001	
Hispanic	2.19 (1.35, 3.55)	0.001	
Non-Hispanic other	1.81 (0.89, 3.69)	0.101	
Office setting		0.040	
Private practice	0.59 (0.36, 0.98)	0.040	
Other	ref		
Territory type		< 0.001	
Urban	7.27 (2.28, 23.20)	< 0.001	
Rural/Other	ref		
Provider specialty		0.020	
General and family practice	0.85 (0.38, 1.93)	0.698	
Internal medicine	ref		
Obstetrics and gynecology	1.41 (0.58, 3.39)	0.446	
Other	0.35 (0.12, 1.02)	0.054	
Visit type		< 0.001	
Preventive	3.25 (2.09, 5.04)	< 0.001	
Other	ref		
STD risk		< 0.001	
Yes	12.51 (6.90, 22.69)	< 0.001	
No	ref		

Notes: Hosmer-Lemeshow Goodness-of-Fit Test Statistics: Satterthwaite F: 1.32; Satterthwaite Adjusted DF: 4; Satterthwaite *p*-value: 0.259.

Appendix Table 3A. Multivariable Regression Analysis of HIV Testing at Visits Made by HIV (-) Males Aged 15–65 Years to U.S. Physicians' Offices, National Ambulatory Medical Care Survey 2009–2012

Model 1: Full		
Predictor	APR (95% CI)	<i>p</i> -value
Age, years		< 0.001
15–19	0.54 (0.24, 1.21)	0.136
20–29	ref	
30–39	0.63 (0.30, 1.29)	0.204
40–49	0.43 (0.22, 0.85)	0.015
50–65	0.13 (0.06, 0.29)	< 0.001
Race/Ethnicity		0.158
Non-Hispanic white	ref	
Non-Hispanic black	1.99 (0.97, 4.11)	0.061
Hispanic	1.23 (0.65, 2.32)	0.519
Non-Hispanic other	0.47 (0.12, 1.88)	0.288
Insurance type		0.164
Medicaid	0.56 (0.26, 1.23)	0.149
Private	ref	
Uninsured	1.31 (0.62, 2.76)	0.473
Other	0.47 (0.17, 1.25)	0.129
Geographic region		0.898
Northeast	1.24 (0.51, 2.99)	0.637
Midwest	ref	
South	1.27 (0.61, 2.66)	0.524
West	1.37 (0.59, 3.14)	0.462
Office setting		0.170
Private practice	0.66 (0.36, 1.20)	0.170
Other	ref	
Territory type		0.217
Urban	1.81 (0.70, 4.66)	0.217
Rural/Other	ref	
Healthcare type		< 0.001
General and family practice	1.08 (0.56, 2.08)	0.822
Internal medicine	ref	
Other	0.18 (0.08, 0.39)	< 0.001
Visit type		< 0.001
Preventive	2.87 (1.68, 4.92)	< 0.001
Other	ref	
STD risk		< 0.001
Yes	30.70 (18.21, 51.78)	< 0.001
No	ref	

Notes: Hosmer-Lemeshow Goodness-of-Fit Test Statistics: Satterthwaite F: 0.91; Satterthwaite Adjusted DF: 7; Satterthwaite *p*-value: 0.497.

Appendix Table 3B. Multivariable Regression Analysis of HIV Testing at Visits Made by HIV (-) Males Aged 15–65 Years to U.S. Physicians' Offices, National Ambulatory Medical Care Survey 2009–2012

Model 2: Reduced (Geographic region removed)			
Predictor	APR (95% CI)	<i>p</i> -value	
Age, years		< 0.001	
15–19	0.55 (0.25, 1.21)	0.137	
20–29	ref		
30–39	0.62 (0.30, 1.29)	0.201	
40–49	0.43 (0.22, 0.86)	0.016	
50–65	0.13 (0.06, 0.29)	< 0.001	
Race/Ethnicity		0.131	
Non-Hispanic white	ref		
Non-Hispanic black	2.01 (1.00, 4.02)	0.049	
Hispanic	1.28 (0.68, 2.42)	0.447	
Non-Hispanic other	0.50 (0.13, 1.94)	0.316	
Insurance type		0.148	
Medicaid	0.55 (0.26, 1.17)	0.121	
Private	ref		
Uninsured	1.31 (0.62, 2.75)	0.479	
Other	0.46 (0.17, 1.25)	0.127	
Office setting		0.107	
Private practice	0.63 (0.36, 1.10)	0.107	
Other	ref		
Territory type		0.212	
Urban	1.83 (0.71, 4.72)	0.212	
Rural/Other	ref		
Healthcare type		< 0.001	
General and family practice	1.10 (0.56, 2.15)	0.789	
Internal medicine	ref		
Other	0.18 (0.09, 0.39)	< 0.001	
Visit type		< 0.001	
Preventive	2.89 (1.70, 4.91)	< 0.001	
Other	ref		
STD risk		< 0.001	
Yes	30.95 (18.31, 52.31)	< 0.001	
No	ref		

Notes: Hosmer-Lemeshow Goodness-of-Fit Test Statistics: Satterthwaite F: 0.66; Satterthwaite Adjusted DF: 7; Satterthwaite *p*-value: 0.709.

Appendix Table 3C. Multivariable Regression Analysis of HIV Testing at Visits Made by HIV (-) Males Aged 15–65 Years to U.S. Physicians' Offices, National Ambulatory Medical Care Survey 2009–2012

Model 3—Final: (Geographic re Predictor	APR (95% CI)	<i>p</i> -value
Age, years		< 0.001
15–19	0.53 (0.24, 1.18)	0.119
20–29	ref	
30–39	0.61 (0.29, 1.27)	0.187
40–49	0.42 (0.21, 0.83)	0.013
50–65	0.12 (0.05, 0.28)	< 0.001
Race/Ethnicity		0.132
Non-Hispanic white	ref	
Non-Hispanic black	1.99 (1.00, 3.96)	0.051
Hispanic	1.32 (0.71, 2.47)	0.383
Non-Hispanic other	0.51 (0.13, 1.96)	0.328
Insurance type		0.089
Medicaid	0.51 (0.24, 1.07)	0.074
Private	ref	
Uninsured	1.25 (0.59, 2.64)	0.560
Other	0.43 (0.16, 1.17)	0.098
Office setting		0.070
Private practice	0.60 (0.35, 1.04)	0.070
Other	ref	
Healthcare type		< 0.001
General and family practice	1.10 (0.56, 2.14)	0.789
Internal medicine	ref	
Other	0.18 (0.08, 0.39)	< 0.001
Visit type		< 0.001
Preventive	2.97 (1.76, 5.01)	< 0.001
Other	ref	
STD risk		< 0.001
Yes	31.84 (19.00, 53.35)	< 0.001
No	ref	

Notes: Hosmer-Lemeshow Goodness-of-Fit Test Statistics: Satterthwaite F: 0.64; Satterthwaite Adjusted DF: 8; Satterthwaite *p*-value: 0.739

Appendix Table 4. Variables Imputed by NCHS Staff

Imputed variable	Percent missing 2009	Percent missing 2010	Percent missing 20111	Percent missing 2012
Birth year	2.4%	1.7%	1.6%	0.1%
Sex	0.7%	0.6%	0.5%	1.4%
Ethnicity	24.1%	21.9%	22.6%	37.7%
Race	23.8%	23.0%	24.5%	33.5%

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